

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

Memphis Environmental Field Office, 8383 Wolf Lake Drive, Bartlett, TN 38133

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Compliance Inspection for Ready Mix Concrete Facilities General NPDES Permit

Facility Name: MMC Materials, Inc. – Piperton Plant	NPDES Tracking Number: TNG110411
Permit Effective Date: April 22, 2014	Permit Expiration Date: October 31, 2017
Date/Time of Inspection: Sep. 1, 2015, 09:34 – 10:45	Inspector Name: Cliff Caudle

Official Contact Person Name: Byron Wegmann, Safety/Environmental Manager	
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Summary of Findings and Comments

On September 1, 2015, Mr. Cliff Caudle of the Tennessee Division of Water Resources (DWR) Memphis Environmental Field Office (MEFO) performed a Compliance Evaluation Inspection (CEI) at the MMC Materials, Inc. (hereinafter referred to as “MMC”) ready-mixed concrete facility located at 273 S.R. 196 in Piperton, Tennessee. DWR personnel met with Mr. Byron Wegmann, Safety/Environmental Manager for MMC to review the facility’s monitoring records and to discuss the facility’s self-monitoring program. Afterwards, Mr. Wegmann accompanied Mr. Caudle on an inspection of the facility. The following is a summary of the findings and observations during and after the inspection.

The RMCP authorizes MMC Materials to discharge Process Wastewater via Outfall 001. According to Mr. Wegmann and based on site observations, the facility has one process water outfall (001) and three storm water discharge points (SW1, SW2, SW3) onsite.

When MMC Materials acquired the facility, their initial assessment indicated that only a single storm water outfall was present on the site, and they submitted their Notice of Intent (NOI) on February 18, 2014 based on that premise. Coverage under the General National Pollutant Discharge Elimination System (NPDES) Permit (TNG110000) for Discharges of Storm Water Runoff and Process Wastewater Associated with Ready Mixed Concrete Facilities (RMCP) was issued for MMC’s Piperton Plant on February 27, 2014, and the facility was assigned tracking number TNG110411.

Subsequently, MMC’s consultant, whom they had contracted to prepare the facility Storm Water Pollution Prevention Plan (SWPPP), discovered that there were two additional storm water outfall points at the facility. MMC then submitted an amended NOI on April 1, 2014, listing all three storm water outfalls. Based on their revised NOI, MMC’s coverage under the RMCP was reissued on April 22, 2014. However, as a result of an oversight, the revised Notice of Coverage (NOC) issued to MMC did not list the three storm water outfalls. Although the storm water outfalls were not listed on the April 2014 NOC, MMC performed storm water

monitoring for all three storm water outfalls for the 2014 monitoring period. The Division appreciates MMC's efforts in complying with RMCP requirements.

According to permit requirements, Process Wastewater must be monitored quarterly at Outfall 001. When there is a discharge, a grab sample of the Process Wastewater must be collected and analyzed for pH, total suspended solids (TSS), and Iron (Fe). The flow rate must also be recorded at the time of sample collection. The permit requires that Storm Water runoff be sampled annually (during a qualifying rain event) and analyzed for pH, TSS, and Fe. For MMC's Piperton plant, this includes Outfalls SW1, SW2, and SW3.

I. Records / Reports

- A copy of the NOC, copies of Discharge Monitoring Reports DMRs for process water and storm water, and corresponding chains of custody (COCs) and laboratory sheets were available for review at the facility. Per request at the time of the inspection, Mr. Wegmann provided copies of the 2014 and 2015 Process Water DMRs for the reporting period. Process Water DMRs for the 2014 and 2015 reporting period indicated "No Discharge" for all monitoring events. Storm water DMRs for the 2014 monitoring event indicated no exceedances on any parameters.
- Process water DMRs for the reporting period were available for review on-site, and were marked "No Discharge." Therefore, no flow measurements have been made. Please refer to Section IV below for details regarding flow measurement.
- A copy of the facility's Storm Water Pollution Prevention Plan (SWPPP) was available for review at the facility at the time of the inspection, and included a list of Best Management Practices (BMPs), and a signed certification.
- Mr. Wegmann provided a log of pH calibrations via email to the MEFO on June 12, 2015. The log contains calibrations using pH buffer solutions 7.01 and 10.01, which are appropriate for the pH values encountered at the site and recorded on the COCs during storm water sampling.

II. Facility Site Review

The facility is in full operational mode, but is used on an as-needed basis, and was not in operation at the time of the inspection.

Figure 1 is attached and shows an overall aerial view of the site and the designated outfalls. Based on site observations, the facility has a three-stage settling/retention basin on-site for its process water, which is mixed with storm water. As previously mentioned, the facility has one outfall/discharge point that is designated as Outfall 001 for Process Water discharges, and three outfall/discharge points that are designated as Outfalls SW1, SW2, and SW3 for Storm Water discharges (see Figure 1).

A sign designating the Process Water discharge point at Outfall 001 was in place as required by the NPDES permit (see photo 1). Please note that the Division of Water Pollution Control is now called the Division of Water Resources.

III. Effluent / Receiving Waters

The facility was not in operation at the time of the inspection. Therefore, no process water discharge was observed at Outfall 001. Process water DMRs for the reporting period (since the facility was initially permitted - April 2014 through 2nd Quarter 2015) were marked “No Discharge” for each quarterly monitoring event.

IV. Flow Measurement

In the event of a process water discharge, MMC uses a software program that calculates the flow rate at Outfall 001 based on the diameter of the discharge pipe. A weblink to the calculator was provided by Mr. Wegmann on September 3, 2015. The calculator appears to be an acceptable method for calculating the flow rate at Outfall 001. Since DMRs were marked “No Discharge” for all quarterly monitoring events during the reporting period, process water flow has not been calculated for the facility since issuance of permit coverage in April, 2014.

V. Self-Compliance Program

A file review revealed that the facility’s Process Water and Annual Storm Water DMRs had been submitted to the Division for the reporting period according to permit requirements. Process Water DMRs for the 2014 and 2015 reporting period indicated “No Discharge” for all monitoring events. Storm water DMRs for the 2014 monitoring event indicated no exceedances on any parameters for all three storm water outfalls. Please refer to Parts I, II, III, IV, VI, VII, VIII, and IX of this report for additional details regarding facility compliance.

VI. Laboratory

Mr. Wegmann of MMC conducts the facility’s sample collection and is responsible for obtaining pH measurements and measuring the flow at Outfall 001. Mr. Wegmann stated that the samples are collected directly into the containers provided by the laboratory, and are placed in a cooler of ice for transport to the laboratory. Analysis of the samples had been contracted to TEC Environmental Laboratories located at 2269 Dr. F.E. Wright Drive in Jackson, Tennessee. Chains of custody reviewed indicated that the temperature of the samples upon receipt at the laboratory was < 4° C, in accordance with test procedures approved under 40 CFR Part 136.

MMC uses a digital pH meter to obtain the pH of the samples immediately after sample collection. The pH meter is calibrated before each sampling event. Mr. Wegmann provided a log of pH calibrations via email to the MEFO on June 12, 2015. The log contains calibrations using pH buffer solutions 7.01 and 10.01, which are appropriate for the pH values encountered at the site, as recorded on the COCs at the time of sampling.

A review of the analytical methods used by TEC Environmental Laboratories revealed that the methods used to analyze for TSS and Fe are in accordance with test procedures approved under 40 CFR Part 136.

As a reminder, in accordance with 40 CFR Part 136, and as referenced in the RMCP, please continue to monitor and record pH within fifteen minutes of sample collection for each process water or storm water sample at the facility.

VII. Operation and Maintenance

The facility is in full operational mode, but is used on an as-needed basis, and was not in operation at the time of the inspection. A Storm Water Pollution Prevention Plan (SWPPP) was developed for the facility in accordance with the RMCP, and an annual evaluation of the facility and SWPPP was performed on January 30, 2015. No modifications to either the facility or the SWPPP were recommended.

One 550-gallon, double-walled diesel Aboveground Storage Tank (AST) and one 1,000-gallon, double-walled diesel AST, owned and operated by MMC, were on-site at the south end of the batch plant, contained 842 gallons of diesel at the time of the inspection, and appeared to be properly maintained. Two additional diesel 550-gallon diesel ASTs, owned by the previous owners of the facility, were on-site, were empty, and were to be removed from the site according to Mr. Wegmann. Mr. Wegmann also stated that as soon as the currently used 550-gallon AST is emptied, it will be moved to another plant, leaving only the 1,000-gallon AST on-site.

Containers of various concrete admixtures and a diesel fuel additive were located at the batch plant. No evidence of spills was observed at the time of the inspection.

A trailer-mounted, backup power generator was on-site next to the diesel tanks on the west side of the batch plant office, and appeared to be in good working order.

VIII. Pollution Prevention

A copy of the facility's Storm Water Pollution Prevention Plan (SWPPP) was available for review on-site at the time of the inspection. An annual evaluation of the facility and SWPPP was performed on January 30, 2015. No modifications to either the facility or the SWPPP were recommended.

IX. Storm Water

Storm water was sampled during the 2014 monitoring period for outfalls SW1, SW2, and SW3, and DMRs were submitted according to permit requirements. A review of the facility's 2014 Storm Water Discharge Monitoring Reports (DMRs) revealed no exceedances for any permit parameters. At the time of the inspection, no storm water discharge was observed from Outfalls SW1, SW2, and SW3.